College Station Independent School District:

Texas District Takes Advantage of Rebuild America Network

EnergySmart School Close-Ups highlight schools and school districts that have found ways to use energy more wisely, lowering their energy bills and raising awareness of energy issues.

- ✓ Improving Existing Buildings
- Financing Building
- Operating and Maintaining Buildings
- ☐ Designing New Buildings
- ☐ Teaching and Learning
- ☐ Using Renewable **Energy Technologies**
- ☐ Using Alternatively Fueled School Buses





Officials in this Texas district reaped enormous rewards from energy improvements and financing: they paid no money up-front for \$1.5 million in capital improvements and improved their schools' learning environments, without redirecting funds for salaries and other operating budgets. They did it by tapping into the local partnership, Rebuild Brazos Valley Energy Conservation Coalition, formed through Rebuild America and the EnergySmart Schools campaign.



College Station's A&M Consolidated High School

A vexing financial problem

By fiscal year 1999-2000, the district's utility bills exceeded \$800,000 annually. It also faced a vexing financial problem: a \$3 million shortfall for critical capital improvements in a district that was nearing the maximum legal tax rate cap. The district entered into an extensive budgetary review, and embarked on a plan to reduce over \$1 million from it's operating budget. Even so, funding for capital improvements would have to be deferred without an innovative financing strategy.

Analyzing energy audit results

In the meantime, the district director of operations George McLean and the deputy superintendent for business David Neal became involved in the local energy partnership. The partnership introduced them to Texas A&M University and its Energy Systems Laboratory, which enlisted the help of yet another partner, Texas Energy Engineering Services Inc. They analyzed the district's utility bills and conducted a walk-through energy audit of the school buildings to determine how they could reduce energy costs. Their analysis revealed that some of the district's building systems were old and highly inefficient. Importantly, many of the systems needing energy improvements had also been targeted for capital improvement work.



PROFILE:

Location:

College Station, Texas

District size:

7,200 students 11 buildings totaling 915,000 square feet

Energy project scope:

New chillers, boilers, and DX units; lighting upgrades throughout; energy management system upgrades; building commissioning

Date completed: Spring 2000

Energy saved:

24,000 mmBtus or 2.04 million kWh projected annual savings

Dollars saved:

\$184,000 annually on direct utility costs; \$28,000 annually on operations and maintenance

Project funding:

Energy Savings
Performance Contract

Contact:

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See the EnergySmart Schools Web site at: www.eren.doe.gov/energysmartschools

Or call the Energy Efficiency and Renewable Energy Clearinghouse (EREC)

Creative financing solutions

The Rebuild America partnership went into action again, helping the district locate 5.6 percent financing that required no up-front capital outlays. Texas Energy Engineering Services provided engineering and construction management services while the Energy Systems Laboratory provided third party oversight as well as independent metering and verification. The loan will be repaid in 2009, with payments coming from a projected direct annual utility savings of \$183,000.



College Station's Southwood Valley School

Ultimately, the College Station Independent School District financed \$1.5 million of its capital improvement work with help from Rebuild America and the EnergySmart Schools campaign. The improvements included:

- Replacement of chillers, boilers, and DX units
- Improved gymnasium lighting in four schools
- Upgrade and replacement of lighting in all schools
- Energy management system upgrades
- Launch of continuous building commissioning to ensure efficient operations and maintenance
- Improved irrigation controls to ensure water efficiency

Like many other districts that have implemented energy improvements, the College Station district now has more comfortable school buildings that are less costly to operate. Perhaps most importantly, teacher salaries didn't pay the bill.



The EnergySmart Schools campaign is operated by Rebuild America, through the U.S. Department of Energy's Office of Building Technology, State and Community Programs.

